



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

US EPA RECORDS CENTER REGION 5



476648

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: ACTION MEMORANDUM - Request for a Time-Critical Removal Action and Exemption from the \$2 Million Statutory Limit at the Baker Perkins Site, Saginaw, Saginaw County, Michigan (Site ID # C545)

FROM: Tricia A. Edwards, On-Scene Coordinator
Emergency Response Section 2

THRU: Jason El-Zein, Chief
Emergency Response Branch 1

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document your approval to expend up to \$3,212,532 and grant an exemption from the \$2 million statutory limit to conduct a time-critical removal action to abate an imminent and substantial threat to public health, welfare, and the environment posed by the Baker Perkins Site (the Site) in Saginaw, Saginaw County, Michigan.

The proposed time-critical removal actions in this memorandum are necessary to mitigate threats to public health, welfare, and the environment posed by the presence of asbestos-containing waste material (ACWM) on the ground at the Site, hazardous substances in bulk containers, and polychlorinated biphenyl (PCB) contaminated debris. Hazardous substances will be characterized, packaged and disposed of at an approved off-site disposal facility in accordance with EPA's Off-Site Rule (40 C.F.R. § 300.440).

The EPA will conduct this removal action in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), and 40 C.F.R. § 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), to abate or eliminate the immediate threats posed to public health and/or the environment.

The uncontrolled conditions of the hazardous substances present at the Site require that this action be classified as a time-critical removal action. The project will require approximately 90 working days to complete. The site is not on the National Priority List (NPL).

Removals involving asbestos, when it is the principal contaminant of concern, have been designated as nationally significant. The Region has requested Headquarters concurrence in accordance with the September 2009, Action Memorandum guidance. Removal actions at this Site will follow precedents and protocols set at other EPA asbestos cleanup sites.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: MIN000505239

RCRA ID:

Category: Time-Critical Removal Action

A. Site Description

The Baker Perkins Site is an abandoned warehouse property located at 1010 Hess Avenue, Saginaw, Saginaw County, Michigan. In 1896, the Werner & Pfleiderer Company purchased the Site and constructed a factory for manufacturing grain mixers. In 1919, Baker Perkins Ltd. (Baker Perkins) purchased the Site to design and manufacture industrial mixing equipment for foods, pharmaceuticals, chemicals, and other raw materials. Baker Perkins also operated a foundry and pattern and machining shops at the Site for metal manufacturing processes. Manufacturing operations ceased in the 1990s. Some of the buildings were demolished between 2010 and 2012. The building demolition debris (an estimated 30,000 tons), excluding scrap steel, remains on the property. Asbestos was not abated from the building prior to any demolition and asbestos is present in the remaining demolition debris. The Saginaw County Land Bank Authority (SCLBA) referred the Site to EPA to conduct a removal assessment and abate environmental and human health threats resulting from abandoned hazardous substances on the property.

1. Removal Site Evaluation

The Baker Perkins Site is located at 1010 Hess Avenue in Saginaw, Saginaw County, Michigan. During the Removal Assessment, on-site structures included the remnants of numerous, multi-story industrial buildings. Many of the industrial buildings had been demolished, and large piles of demolition debris remained within the footprint of the former buildings. Some remaining buildings are intact or partially intact. Figure 2 shows the Site features during the Removal Assessment.

The Site was referred to EPA's Criminal Investigative Division (CID), who shared the referral with the Emergency Response Branch (ERB). CID has been conducting an investigation related to the previous property owners.

The Site is bounded to the north by residential properties, to the east by a car wash and residential properties, to the south by a cemetery, and to the west by the Process Equipment and Systems industrial buildings. During the Removal Assessment, the Site was enclosed by a perimeter fence. However, at least one section of the fence had been breached, and evidence of trespassing was observed at the Site.

On September 15, 2011, Saginaw Development LLC purchased all but one of the Site parcels. On October 13, 2011, the City of Saginaw issued a demolition permit to Saginaw Development LLC. The permit expired on April 30, 2012. Under the permit, the demolition contractor demolished many former manufacturing buildings, and scrapped metal building materials. Since the purchase of the property, Saginaw Development has not paid any property taxes and the property reverted to the SCLBA in the spring of 2014.

The SCLBA contracted an environmental firm to assess the site. Test results indicated the presence of asbestos in the debris piles, PCBs in the oil-stained wood block flooring and volatile organic compounds (VOC) in the UST and totes. A detailed report is included in the Administrative Record (Author: AKT Peerless, October 24, 2013).

2. Physical Location

The Site is located at 1010 Hess Avenue in Saginaw, Saginaw County, Michigan, in a mixed residential, commercial, and industrial area (Figure 1). The Site coordinates are 43°23'59.09" North latitude and 83°57'04.66" West longitude. The Site occupies approximately 16 acres. According to the Saginaw County Auditor's Office, the Site is located on Parcels Nos. 12045100000, 12045100200, 12045100400, 12045100500, 12045100600, 12045100700, 12045100800 and 12045100900. During the Removal Assessment, the Saginaw County Land Bank Authority owned Parcel No. 12045100500 and the Saginaw Development Limited Liability Corporation (LLC) owned the remaining parcels.

An Environmental Justice (EJ) analysis for the Baker Perkins Site was conducted. Screening of the surrounding area used Region 5's EJ Screen Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Region 5 has reviewed environmental and demographic data for the area surrounding the Baker Perkins Site and determined there is a high potential for EJ concerns at this location.

3. Site characteristics

The Site is bounded to the north by residential properties, to the east by a car wash and residential properties, to the south by a cemetery, and to the west by the Process Equipment and Systems industrial buildings. During the Removal Assessment, a perimeter fence enclosed the Site. However, some sections of the fence had been breached, and evidence of trespassing was observed at the Site.

During the Removal Assessment, on-site structures included numerous, multi-story industrial buildings. Many of the industrial buildings had been demolished, and large piles of demolition debris remained within the footprint of the former buildings. Some remaining buildings were intact or partially intact. Figure 2 shows the Site features during the Removal Assessment.

4. Release or threatened release into the environment of a hazardous substance, or pollutant, or contaminant

EPA documented the presence of hazardous substances and pollutants during its Site Assessment activities conducted on April 22 and 23, 2014. EPA confirmed the presence of hazardous substances at the Site including friable and regulated asbestos, polychlorinated biphenyls (PCBs), and flammable liquid waste. As described in Section III below, the contaminants pose a threat of release by migration and surface exposure.

Friable asbestos is a listed hazardous substance under 40 C.F.R. § 302.4. EPA testing has documented friable asbestos within the structure and debris at the Site. Friable asbestos in the waste piles has the potential to leave the Site via airborne migration.

A release or threat of release of hazardous substances, pollutants, or contaminants is present at the Site. The Site is open to foot and vehicle traffic, partially due to a failure in the Site property fencing.

Friable ACWM may also be released off site through wind or rain action. The oily-residue from the PCB contaminated blocks also poses a threat for runoff from the site, if continued exposure to precipitation.

5. NPL status

This Site is not on the NPL, and has not been proposed for the NPL. The Site has not received a Hazard Ranking Score and is not being referred to the NPL Site Assessment Program.

6. Maps, pictures and other graphic representations

Figure 1 Site Location Map
Figure 2 Site Layout Map
Photographs

B. Other Actions to Date

1. Previous actions

This Action Memorandum documents previous response and investigatory actions in the background section (Section II.A.1).

2. Current actions

The Site is not secure and there are currently no actions being conducted at the Site.

C. State and Local Authorities' Roles

1. State and local actions to date

The Michigan Department of Environmental Quality (MDEQ) has been working with EPA Criminal Investigation Division (CID) on this site. The investigation is on-going.

2. Potential for continued State/local response

On April 21, 2014, EPA received a written request from the SCLBA to determine if the Site met the criteria for a time-critical removal action. The request letter is included in the Administrative Record.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions present at the Site present an imminent and substantial threat to the public health, or welfare, and the environment and meet the criteria for a time-critical removal action set forth in Section 300.415(b)(2) of the NCP. These factors include, but are not limited to, the following:

Actual or potential exposure of nearby human populations, animals, or the food chain to hazardous substances, pollutants, or contaminants

During the Removal Assessment, chrysotile asbestos was identified in samples collected from piles of damaged demolition debris at the Site, including Transite, Thermal System Insulation (TSI), firebricks, and roofing materials. Materials at the Site containing asbestos are summarized below. A summary of Laboratory Analytical Results is included in the attachments, Table 1.

- Transite fragments observed in the demolition debris piles in Areas 3 and 4 were damaged during demolition and are classified as RACM. The classification of these transite fragments as RACM is consistent with the definition of RACM in accordance with 40 CFR 61.141 Definitions for Regulated asbestos-containing material. Specifically, subpart (d) for RACM classifies these transite fragments as Category II nonfriable ACM because they contain greater than 1% asbestos and were crumbled by the forces exerted on them during demolition operations. Therefore, these specific non-friable acm's should have been removed from the building(s) prior to the demolition activities. During the Site Assessment, transite fragments were field tested to determine friability by picking-up some transite fragments and assessing the physical characteristics against the definition of friability as defined in 40 CFR 61.141 Definitions. Field tested transite fragments did not, when dry, crumble, pulverize, or reduce to powder by hand pressure. While 40 CFR 61.141 classifies the transite fragments as non-friable, they present a potential airborne exposure hazard because they have been damaged. Evidence of unauthorized personnel accessing the site increases the probability of this non-friable form of acm becoming an airborne threat.

- Thermal System Insulation (TSI) and firebrick in demolition debris piles in Area 3 are classified as RACM. The classification of TSI and firebrick as RACM is consistent with the definition of RACM in accordance with 40 CFR 61.141 Definitions for Regulated asbestos-containing material. TSI is a RACM in accordance with subpart (a) for RACM

because it contains greater than 1% asbestos and is friable. The firebrick is RACM in accordance with subpart (d) because it contains greater than 1% asbestos and has become crumbled by the forces on them in the course of demolition operations. Both acm's were field tested to determine friability by picking-up samples and assessing the physical characteristics against the definition of friability as defined in 40 CFR 61.141 Definitions. Field tested pieces of TSI did reduce to a powder by hand pressure. Field testing on some of the pieces of firebrick did crumble by hand pressure. Both TSI (RACM) and firebrick (Category II nonfriable acm) materials should have been removed from the building(s) prior to the demolition activities. The TSI and firebrick is classified as a hazardous substance as defined by 40 CFR Section 302.4 of the NCP because it is friable. Friable acm presents a potential airborne exposure hazard. Evidence of unauthorized personnel accessing the site increases the probability of this friable form of acm of becoming an airborne threat.

In accordance with the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 61, Subpart M, the TSI, transite and fire brick should have been removed from the building(s) prior to demolition because of the potential for these specific ACM's to release asbestos fibers into the ambient air during the course of the demolition activities. Because they remained intact during the demolition activities, these ACM's are no have been broken, crushed and no longer maintain their original manufactured condition, and therefore classified as damaged. The damaged TSI, transite and firebricks are comingled with non-ACM building materials in the demolition debris piles. Damaged ACM such as TSI, transite and firebricks can release particulate asbestos fibers when damaged. Because damaged and friable ACM are comingled with non-ACM building materials, the surfaces of non-ACM building materials in the demolition debris piles may have become contaminated with asbestos.

A personal breathing zone air sample collected during the asbestos assessment activities contained 0.003 fibers per cubic centimeter (f/cc) asbestos, confirming the presence of asbestos fibers in the breathing zone at the Site. The damaged ACM in the demolition debris piles at the Site is exposed to ambient wind and weather conditions. Airborne dust generated from the damaged ACM and demolition debris contaminated with asbestos pose a threat to human health through the inhalation of asbestos fibers. According to 40 CFR Section 302.4 of the NCP, asbestos is a hazardous substance. Asbestos is of potential concern because chronic inhalation exposure to airborne asbestos fibers can increase the risk of lung diseases such as asbestosis, mesothelioma, and lung cancer. Sub-acute exposures as short as a few days have been shown to cause mesothelioma.

EPA confirmed the presence of potentially friable ACM and RACM co-mingled with demolition debris throughout the portion of the Site where the manufacturing buildings were previously located. Sample analysis determined that the ACM contained chrysotile, a regulated form of asbestos. The ACM and RACM in the building debris piles are damaged, fragmented, and exposed to weather conditions, including sunlight, wind, freeze-and-thaw cycles, and precipitation, that increase the likelihood of particulate migration. There is actual or potential exposure to nearby human receptors, including residents, the neighboring business, trespassers, and future Site workers. Possible exposure routes to hazardous substances include inhalation of airborne ACM.

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for long periods may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos. People with asbestosis have difficulty breathing, often a persistent cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death. EPA has determined that asbestos is a human carcinogen (ATSDR, CAS # 1332-21-4, September 2001).

Wood block flooring materials in a building south of Area 3 is contaminated with PCB oil (Aroclor 1254) at a concentration of 15 milligrams per kilogram (mg/kg), exceeding the EPA Removal Management Level (RML) of 11 mg/kg. PCBs pose a threat to the health of humans and other animals and are highly persistent in the environment. Aroclor 1254 is a strong oxidizer, which can be absorbed into the body through inhalation, ingestion, or dermal contact. Contact with Aroclor 1254 has been known to cause irritation of the eye, rashes, and chloracne. Aroclor 1254 exposure has also been linked to liver damage, changes in the immune system, behavioral alterations and impaired reproduction. EPA and the International Agency for Research on Cancer determined that PCBs are a probable carcinogen to humans and have been linked to cancers of the liver and biliary tract.

Approximately 15,000 gallons of ignitable liquid, believed to be diesel fuel is present in an abandoned underground storage tank (UST) near the northwest corner of Area 2; this waste meets the characteristic for ignitability established in 40 CFR §261.21, with a flash point above 140°F. The material in the UST also exceeded the criteria for toxicity established in 40 CFR §261.24. Benzene was detected at a concentration of 37 mg/kg milligrams per kilogram (mg/kg). Using EPA's "20-times rule" to approximate TCLP results, the benzene result exceeds the toxicity characteristic for hazardous waste of 0.5 ppm by approximately a factor of three. Aging USTs are prone to leaking contents into the surrounding soil and groundwater. This UST poses an increasing potential threat of the release of volatile organic compounds (VOCs) to the environment the longer its contents remain at the Site.

Approximately 500 gallons of an unknown liquid is present in two abandoned 250-gallon polyethylene totes in the area at the southeast corner of Area 7 at the Site (Figure 2, Site Layout Map). The samples taken from these totes identified elevated levels of Ethylbenzene (13 mg/kg), 1,2-4 Trimethylbenzene (72 mg/kg) and Xylenes (60 mg/kg), each exceeding the MDEQ Part 201 Groundwater Surface water Interface criteria, as well as Direct Contact Criteria for soil. These totes pose a potential threat of accidental or intentional release of VOCs to soil at the Site.

During the Removal Assessment, no signs were posted around the Site perimeter to warn the public of the potential risk of exposure to asbestos or other chemical and physical hazards at the Site. Perimeter fencing has been breached in places, and evidence of unauthorized personnel accessing the Site was observed. Trespassers entering the Site could easily be exposed to airborne asbestos fibers or come in direct contact with physical hazards in and around the demolition debris piles. Trespassers also could cause accidental or intentional release of asbestos or ignitable (D001) and benzene (D018) wastes stored in abandoned UST at the Site.

There are no signs or other deterrents to warn the public of the potential asbestos hazard at the Site. Site access is unrestricted, and trespassers entering the Site could be exposed to airborne asbestos fibers or come in direct contact with damaged ACM or the PCB contaminated wood block. During the site assessment, START observed signs of trespassing on the site.

Hazardous substances, pollutants, or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

Approximately 15,000 gallons of ignitable (D001) and toxic (D018) hazardous waste are present in an abandoned UST near the northwest corner of Area 2 at the Site. Aging USTs are prone to leaking contents into the surrounding soil and groundwater. This UST poses an increasing potential threat of the release of VOCs to the environment the longer its contents remain at the Site. VOCs identified in the UST included: Benzene (37mg/kg), Toluene (540mg/kg), Xylene (2,200mg/kg), and 1,2,4-Trimethylbenzene (2,800mg/kg). Semi-Volatile Organic Compounds (SVOCs) were also identified. Analytical results identified the following SVOCs at elevated levels: Acenaphthalene (76mg/kg), 4-Chloroaniline (1,900mg/kg), Fluorene (840mg/kg), 2-Methylnaphthalene (7,600mg/kg), Naphthalene (1,900mg/kg), and Phenanthrene (1,200mg/kg).

Approximately 500 gallons of an unknown liquid are present in two abandoned 250-gallon polyethylene totes in the area at the southeast corner of Area 7 at the Site. Many containers are in poor condition and are exposed to the elements with open tops. These totes pose a potential threat of accidental or intentional release of VOCs to soil at the Site. VOC's present in the totes included: Ethylbenzene (13mg/kg), Toluene (12mg/kg), Xylene (60mg/kg), and 1,2,4-Trimethylbenzene (72mg/kg).

The health effects of volatile organic compounds can vary greatly according to the compound, which can range from being highly toxic to having no known health effects. The health effects of volatile organic compounds depend on the nature of the volatile organic compound, the level of exposure, and the length of exposure.

Long-term exposure to volatile organic compounds, such as those listed above can cause damage to the liver, kidneys, and central nervous system. Short-term exposure to volatile organic compounds can cause eye and respiratory tract irritation, headaches, dizziness, visual disorders, fatigue, loss of coordination, allergic skin reactions, nausea, and memory impairment.

Weather conditions that may cause hazardous substances or pollutants and contaminants to migrate or be released;

Damaged ACM and asbestos-contaminated building materials in the demolition debris piles at the Site are exposed to ambient wind and weather conditions. Damaged and friable ACM can release asbestos fibers to air and soil at the Site and pose a threat of offsite release of asbestos fibers. Temperatures in the Saginaw region range from 15° to 84°, on average. The region typically receives over 30 inches of precipitation. The precipitation could contribute to run off from the site and pose a threat off site from the spread of contamination.

Threat of fire or explosion;

An estimated 15,000 gallons of suspected gasoline and an estimated 500 gallons of suspected diesel or fuel oil are present at the Site. Despite the fact that all electrical power and natural gas have been shut off at the Site, the threat of fire or explosion is moderate because of the flammable liquids on site and the potential for trespassing. A residential neighborhood is approximately 50 feet from the property line. Asbestos fibers could be released into the air during a fire or into the water from fire run-off water and pose a threat off site.

The availability of other appropriate federal or State response mechanisms to respond to the release;

Neither the SCLBA nor the MDEQ has the resources necessary to mitigate the threat of release. In recognition of this inability to finance response actions, SCLBA issued a letter of referral to EPA requesting assistance to mitigate hazardous substances at the Site.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the known and suspected hazardous substances on Site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

Section 104 (c) of CERCLA, as amended by Superfund Amendment and Reauthorization (SARA) limits the Federal emergency response to \$2 million unless three criteria are met. The quantities and levels of hazardous substances at the Baker Perkins Site warrant the \$2 million exemption based on the following factors:

A) There is an immediate risk to public health or welfare or the environment;

The Site is located in a mixed commercial and residential neighborhood. Trespassing occurs at the Site on a regular basis, and fencing is not present around the Site, which facilitates trespassing.

The Site is not secure and ACM and PCB contaminated wood block has been documented in the debris piles on site. The debris piles are not covered or maintained, therefore subject to deterioration and can be easily spread throughout the residential neighborhood by wind, rain and trespassers. Various containers have been identified on site, also unsecured to weather, trespassers, and vandals.

B) Continued response actions are immediately required to prevent, limit, or mitigate an emergency;

The continued presence of hazardous substances at the Site constitutes an imminent threat

to human health, welfare, and the environment. The effects of wind and rain on the ACM and PCB contaminated blocks constitute a threat of release that, if left unmitigated, could impact the environment and surrounding residential neighborhoods.

C) Assistance will not otherwise be provided on a timely basis;

In a letter dated March 4, 2014, as well as a revised letter dated April 21, 2014, SCLBA requested that EPA assist the state by conducting a time-critical removal action at the Baker Perkins Site. Neither MDEQ nor any local government has adequate resources to conduct a time-critical removal action of this magnitude.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on Site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. Proposed removal activities on Site will include:

- a. Develop and implement a Site Health and Safety Plan, a Site Contingency Plan and an Air Monitoring/Sampling Plan;
- b. Establish and implement an ACM debris management plan, including appropriate control mechanisms (e.g. wetting);
- c. Secure the perimeter fence, as needed;
- d. Inventory and perform hazard characterization on substances contained in drums, totes, and other containers;
- e. Inventory and perform sampling to further delineate PCB-contaminated media;
- f. Remove and dispose of solid waste to facilitate removal activities;
- g. Perform sampling and analysis to determine disposal options;
- h. Transport and dispose of all ACM, or identified hazardous substances, pollutants, ACM-impacted wastes, or contaminants at an EPA-approved disposal facility in accordance with U.S. EPA Off-Site Rule (40 CFR § 300.440);

This removal action will be conducted in a manner not inconsistent with the NCP. The estimated costs to complete the activities outlined above are summarized below. These activities will require an estimated 90 on-site working days to complete. Detailed cleanup contractor costs are presented in Attachment II.

The OSC will initiate planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. Elimination of hazardous substances, pollutants and contaminants that pose a substantial threat of release is expected to minimize requirements for post-removal Site controls.

2. Contribution to remedial performance

The proposed removal actions will not impede future actions based on available information. No long-term remedial actions are anticipated for the Site. The threats posed by the known asbestos debris, meet the criteria listed in Section 300.415(b)(2) of the NCP and the response actions proposed are consistent with any potential long-term remedial actions, which may be required. However, elimination of hazardous substances, pollutants and contaminants that pose a substantial threat of release is likely to reduce the need for any long-term remedial actions.

3. Engineering Evaluation/Cost Analysis (EE/CA)

Not Applicable.

4. Applicable or relevant and appropriate requirements (ARARs)

EPA will comply with all applicable, relevant, and appropriate requirements (ARARs) of Federal and State law to the extent practicable. The OSC sent a letter on July 11, 2014, to Richard Parsons at the MDEQ requesting the identification of any applicable state and federal ARARs.

Federal

The following is a list of action- and chemical-specific federal ARARs the OSC identified:

- 49 U.S.C. § 5101 et seq. regulates the transportation of hazardous waste and hazardous substances by aircraft, railcars, vessels, and motor vehicles. It is applicable if hazardous materials are transported to or from a site.
- All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action shall be treated, stored, or disposed at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.
- National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61, Subparts A and M, apply to the removal of asbestos and ACM.
- The Toxic Substances Control Act (TSCA) 40 CFR § 261 applies to the storage, incineration, landfilling, and marking of PCBs.

State

EPA has not received a reply to the request for state ARARs. EPA will comply with any ARARs, to the extent practicable, that are identified in a timely manner.

B. Removal Project Ceiling Estimate – Extramural Costs:

| REMOVAL ACTION PROJECT CEILING ESTIMATE | |
|---|--------------|
| <u>Extramural Costs:</u> | |
| <u>Regional Removal Allowance Costs:</u> | |
| Total Cleanup Contractor Costs (This cost category includes estimates for ERRS, subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies. Include a 20% contingency) | \$ 2,476,347 |
| <u>Other Extramural Costs Not Funded from the Regional Allowance:</u> | \$ 200,763 |
| Total START, including multiplier costs | \$ 0 |
| Total Decontamination, Analytical & Tech. Services (DATS) | \$ 0 |
| Total CLP | \$200,763 |
| Subtotal | \$2,677,110 |
| Subtotal Extramural Costs | \$ 535,422 |
| Extramural Costs Contingency (20% of Subtotal, Extramural Costs rounded to nearest thousand) | \$3,212,532 |
| TOTAL REMOVAL ACTION PROJECT CEILING | |

The response actions described in this memorandum directly address the actual or threatened release of hazardous substances, pollutants, or contaminants at the Site, which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Section II, III, and IV above, actual or threatened releases of hazardous substances and pollutants or contaminants from this Site, if not addressed by implementing or delaying the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment, increasing the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

VIII. OUTSTANDING POLICY ISSUES

In compliance with the *Framework for Investigating Asbestos-Contaminated Superfund Sites* (Framework), EPA implemented the following step-by-step approach outlined in the Framework to investigate and characterize the potential for human exposure from asbestos contamination at the Site.

Step 1 – Review historical and current data – EPA reviewed Site records where ACM was previously identified by SCLBA sampling investigations.

Step 2 – Has there been (or is there a threat of) a release to the environment? – EPA documented a threat of release of ACM to the environment during the April 2014 Site Assessment. For sites where a release has not been documented, the Framework prescribes additional steps to further characterize potential exposure. However, where a release has been documented, the Framework allows for a response action without further characterization.

Based on the factors outlined above, the OSC recommends that a removal be performed to mitigate asbestos exposure at the Site.

The removal involves a nationally significant and precedent-setting issue because the primary driving contaminant addressed by the removal is asbestos containing materials. In accordance with Re-delegation R-14-2, a request for concurrence on actions proposed in the memorandum was sought and obtained from the EPA Office of Emergency Management (OEM).

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Confidential Enforcement Addendum.

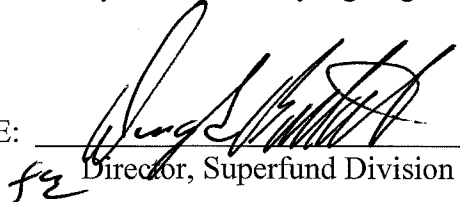
$$(\$3,212,532 + \$73,320) + (57.47\% \times \$3,285,852) = \$5,174,231$$

The total EPA costs of this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$5,174,231.¹

X. RECOMMENDATION

This decision document represents the selected removal action for the Baker Perkins Site located in Saginaw, Saginaw County, Michigan. This document has been developed in accordance with CERCLA as amended, and the recommended response action is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the Site meet the NCP Section 300.415(b) criteria for a removal and the CERCLA section 104(c) emergency exemption from the \$2 million limitation. The total project ceiling, if approved, will be \$3,212,532. Of this, as much as \$3,011,300 may come from the Regional Removal allowance. I recommend your approval of the proposed time-critical removal actions. You may indicate your decision by signing below.

APPROVE:  DATE: 4/15/2015
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum

Figures:

1. Site Location Map
2. Site Layout Map
3. Photo Log

Tables:

1. Laboratory Analytical Results

Attachments:

1. Detailed Cleanup Contractor Cost Estimate
2. Independent Government Cost Estimate
3. Administrative Record Index

cc: Brian Schlieger, U.S. EPA, 5104A

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L. Nelson, U.S. DOI, w/o Enf. Addendum, (email: Lindy_Nelson@ios.doi.gov)

BCC PAGE HAS BEEN REDACTED

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ENFORCEMENT ADDENDUM

HAS BEEN REDACTED – THREE PAGES

ENFORCEMENT CONFIDENTIAL

NOT SUBJECT TO DISCOVERY

FOIA EXEMPT

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

FIGURE 1
SITE LOCATION MAP
BAKER PERKINS SITE
SAGINAW, MI
February 2015



FIGURE 2
SITE LAYOUT MAP
BAKER PERKINS SITE
SAGINAW, MI
February 2015

**FIGURE 3
PHOTO LOG
BAKER PERKINS SITE
SAGINAW, MI
February 2015**



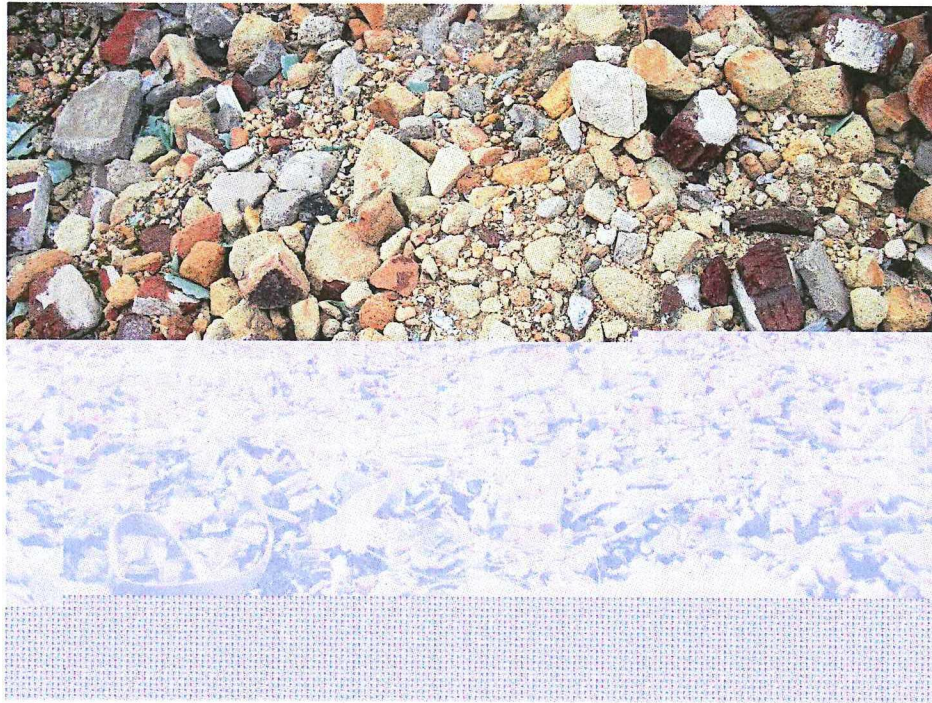
Demolition Debris Piles in Area 3

4/22/14



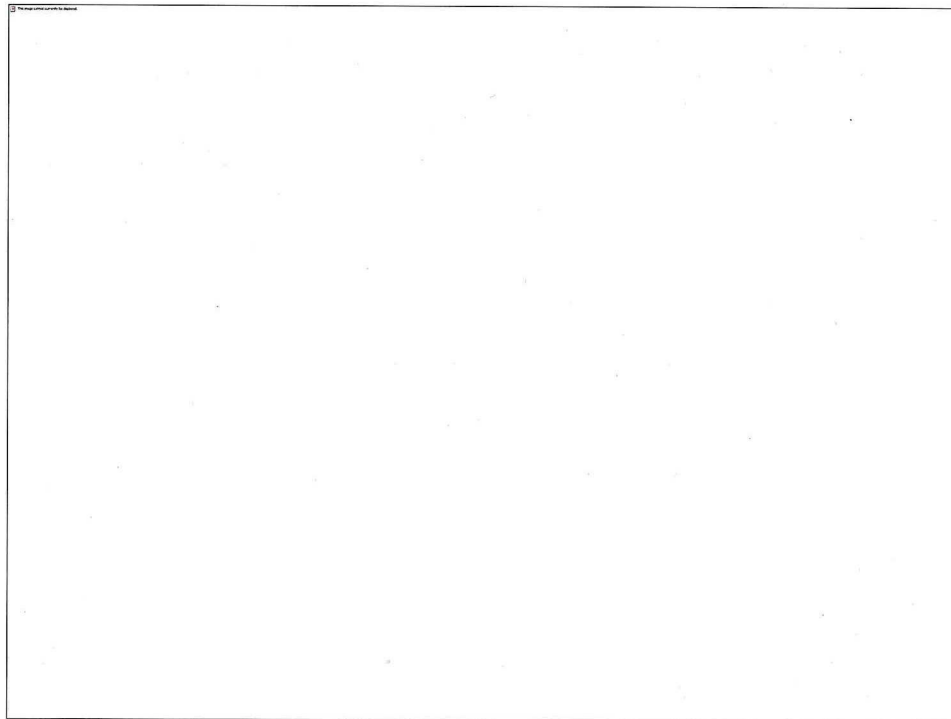
Demolition Debris Piles in Area 3

4/22/14



Fire Brick Debris in Area 3

4/22/14



Demolition Debris Piles in Area 4

4/22/14



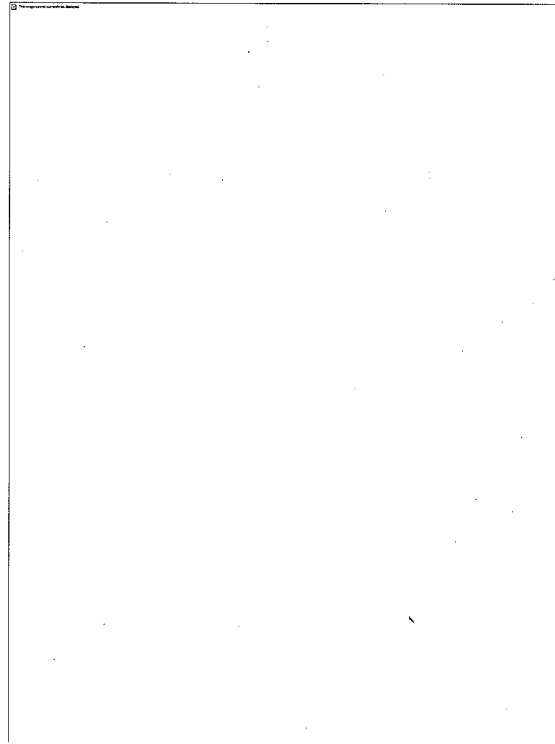
Demolition Debris Piles in Area 6

4/22/14



Wood block flooring sample inside building south of Area 3

4/22/14



Two 250-gallon totes inside building at southeast corner of Area 7

TABLE 1
LABORATORY ANALYTICAL RESULTS
BAKER PERKINS SITE
SAGINAW, MI
February 2015

| HA No. | Site Area | Sample ID No. | Building Material | Laboratory Result (% Asbestos) | Friable | NESHAP Classification |
|--------|-----------|---------------|--------------------------|--------------------------------|---------|----------------------------|
| HA-1 | Area 3 | BP-BLK-HA1-A | Transite | 15 | No | RACM |
| | | BP-BLK-HA1-B | | Not Analyzed | | |
| | | BP-BLK-HA1-C | | Not Analyzed | | |
| HA-2 | | BP-BLK-HA2-A | Transite | 15 | No | RACM |
| | | BP-BLK-HA2-B | | Not Analyzed | | |
| | | BP-BLK-HA2-C | | Not Analyzed | | |
| HA-3 | | BP-BLK-HA3-A | Felt Roofing Material | ND | No | Not Regulated |
| | | BP-BLK-HA3-B | | ND | | |
| | | BP-BLK-HA3-C | | ND | | |
| HA-4 | | BP-BLK-HA4-A | Roofing Material | ND | No | Non-friable Category I ACM |
| | | BP-BLK-HA4-B | | 5 | | |
| | | BP-BLK-HA4-C | | 2 | | |
| HA-5 | | BP-BLK-HA5-A | TSI | 20 | Yes | RACM |
| | | BP-BLK-HA5-B | | Not Analyzed | | |
| | | BP-BLK-HA5-C | | Not Analyzed | | |
| HA-6 | | BP-BLK-HA6-A | Fire Brick | ND | Yes | RACM |
| | | BP-BLK-HA6-B | | ND | | |
| | | BP-BLK-HA6-C | | 2 | | |
| HA-7 | Area 4 | BP-BLK-HA7-A | Transite | 15 | No | RACM |
| | | BP-BLK-HA7-B | | Not Analyzed | | |
| | | BP-BLK-HA7-C | | 20 | | |
| HA-8 | | BP-BLK-HA8-A | TSI | ND | Yes | Not Regulated |
| HA-9 | | BP-BLK-HA9-A | Rough Coat Plaster | ND | No | Not Regulated |
| HA-10 | | BP-BLK-HA10-A | Surfacing Plaster | ND | No | Not Regulated |
| HA-11 | | BP-BLK-HA11-A | Felt Roofing Material | ND | No | Not Regulated |
| | | BP-BLK-HA11-B | | ND | | |
| | | BP-BLK-HA11-C | | ND | | |
| HA-12 | | BP-BLK-HA12-A | Asphalt Roofing Material | ND | No | |
| | | BP-BLK-HA12-B | | ND | | |

| | | | | | | |
|-------|--------|---------------|--------------------------|--------------|-----|----------------------------------|
| | | BP-BLK-HA12-C | | 10 | | Non-friable Category I ACM |
| HA-13 | Area 6 | BP-BLK-HA13-A | Fire Brick | ND | Yes | Not Regulated |
| | | BP-BLK-HA13-B | | ND | | |
| | | BP-BLK-HA13-C | | ND | | |
| HA-14 | | BP-BLK-HA14-A | Felt Roofing Material | ND | No | Non-friable Category I ACM |
| | | BP-BLK-HA14-B | | ND | | |
| | | BP-BLK-HA14-C | | 50 | | |
| HA-15 | | BP-BLK-HA15-A | Asphalt Roofing Material | ND | No | Non-friable Category I ACM |
| | | BP-BLK-HA15-B | | 4 | | |
| | | BP-BLK-HA15-C | | Not Analyzed | | |

Notes:

Bold results indicate detected compounds.

Highlighted results indicate ACM that poses an actual or potential risk of exposure to nearby human populations.

ACM = Asbestos-containing material

NESHAP = National Emissions Standards for Hazardous Air Pollutants

HA = Homogeneous area

RACM = Regulated asbestos-containing material

ID = Identification

TSI = Thermal system insulation

ND = Not detected

Wood Block Sampling Analysis

| Parameter | Analytical Method | Unit | Sample ID No. | | | | | |
|--------------|-------------------|-------|---------------|----------|-------------|----------|----------|----------|
| | | | BP-WB-01 | BP-WB-02 | BP-WB-DUP1* | BP-WB-03 | BP-WB-04 | BP-WB-05 |
| PCBs | | | | | | | | |
| Aroclor 1016 | SW846-8082A | mg/kg | 0.17 U | 0.14 U | 0.14 U | 0.10 U | 0.40 U | 1.1 U |
| Aroclor 1221 | SW846-8082A | mg/kg | 0.17 U | 0.14 U | 0.14 U | 0.10 U | 0.40 U | 1.1 U |
| Aroclor 1232 | SW846-8082A | mg/kg | 0.17 U | 0.14 U | 0.14 U | 0.10 U | 0.40 U | 1.1 U |
| Aroclor 1242 | SW846-8082A | mg/kg | 0.17 U | 0.14 U | 0.14 U | 0.10 U | 0.40 U | 1.1 U |
| Aroclor 1248 | SW846-8082A | mg/kg | 0.17 U | 1.1 | 1.7 | 0.10 U | 0.40 U | 1.1 U |
| Aroclor 1254 | SW846-8082A | mg/kg | 0.17 U | 3.5 U | 3.5 U | 10 U | 1.2 U | 15 |
| Aroclor 1260 | SW846-8082A | mg/kg | 0.17 U | 3.5 U | 3.5 U | 10 U | 1.2 U | 1.1 U |
| Aroclor 1268 | SW846-8082A | mg/kg | 0.17 U | 3.5 U | 3.5 U | 10 U | 1.2 U | 1.1 U |

Notes:

Bold results indicate detected compounds.

Highlighted results exceed applicable federal or state regulations.

* = Duplicate of sample BP-WB-02

ID = Identification

PCB = Polychlorinated biphenyl

mg/kg = Milligram per kilogram

U = Not detected

DETAILED CLEANUP CONTRACTOR ESTIMATE

HAS BEEN REDACTED – ONE PAGE

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

**INDEPENDENT GOVERNMENT COST ESTIMATE
HAS BEEN REDACTED – TWO PAGES**

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

**ADMINISTRATIVE RECORD INDEX
BAKER PERKINS SITE
SAGINAW, MI
February 2015**

| NO. | DATE | AUTHOR | RECIPIENT | TITLE/DESCRIPTION | PAGES |
|------------|-------------|----------------------|--------------------------|--|--------------|
| | 10/3/11 | City of Saginaw | Saginaw Development, LLC | Demolition / Wreckage Permit | 1 |
| | 10/24/13 | AKT Peerless | Tom Miller SCLBA | Baker Perkins Current Conditions Summary | 35 |
| | 2/28/14 | Scott Crofoot | Multiple | Email correspondence b/t Saginaw and MDEQ regarding 1010 Hess Avenue | 14 |
| | 3/4/2014 | T. Novak Saginaw Co. | EPA Region 5 | Request for assistance Background Reports | 37 |
| | 4/21/14 | T. Novak Saginaw Co. | EPA Region 5 | Referral Letter Access Agreement | 4 |
| | 6/11/14 | TetraTech | T. Edwards, EPA | Site Assessment Report | 137 |
| | 7/11/14 | T. Edwards, EPA | R. Parsons, MDEQ | ARAR Request | 2 |
| | | T. Edwards, EPA | R. Karl, EPA | Action Memorandum Baker Perkins Site (PENDING) | |